



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/903,694	07/13/2001	Narihiro Tahara	1403-0212P	9156
2292	7590	03/11/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			WYROZEBSKI LEE, KATARZYNA I	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 03/11/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	09/903,694		TAHARA ET AL.	
	Examiner		Art Unit	
	Katarzyna Wyrozebski Lee		1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. <u>1203</u> . |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____. | 6) <input type="checkbox"/> Other: _____. |

Art Unit: 1714

In view of applicant's amendment and interview conducted on December 17, 2003 the examiner agreed to prosecute the claims. In the amendment the applicants have shifted the invention from rubber composition to a tire tread, which is an article. In view of the above amendment, following office action is final necessitated by amendment.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over SCHOLL (US 5,663,226).

The composition of the prior art of Scholl comprises rubber, such as SBR rubber and silica reinforcing filler (Table col. 8). The composition further comprises, in addition to reinforcing agent, a filler (Abstract).

Suitable fillers of Scholl include (col. 4, lines 44-65) silicates having particle size of 100-400 nm, natural silicates and glass fibers. The above fillers are utilized in an amount of 0.05-20 pbw preferably 0.1-10 pbw (col. 5, lines 10-12). The specification of Scholl further suggests or teaches use of softeners (col. 5, line 27). Since silicates of the prior art of Scholl are also

Art Unit: 1714

required by the claims of the present invention, their Mohs hardness will therefore be an intrinsic property.

The prior art of Scholl does not specifically state that the article made includes tire tread, however, tire treads are implied by following statement: "...production of tires having low rolling resistance and a high abrasion resistance." The property of rolling resistance and abrasion resistance are specific to the tire treads (col. 1, lines 12-13).

Although the prior art of Scholl does not specifically disclose that two fillers, which are utilized are glass fiber and silicate and that they are utilized together, such combination would be an obvious modification. Mixtures of filler are contemplated by the prior art of SCHOLL in col. 5, line 7 of the specification. It is well settled that it is prima facie obvious to combine two ingredients, each of which is targeted by the prior art to be useful for the same purpose. *In re Linder* 457 F.2d 506,509, 173 USPQ 356, 359 (CCPA 1972).

In the light of the above disclosure it would have been obvious to one having ordinary skill in the art at the time of the instant invention to utilize both glass fibers and silicate in the composition of Scholl and thereby arrive at the present invention since it is prima facie obvious to combine two ingredients, each of which is targeted by the prior art to be useful for the same purpose.

3. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over WOLFF (US 4,517,336).

Art Unit: 1714

The prior art of WOLFF discloses rubber composition for tire tread (col. 19, line 18).

The composition of WOLFF comprises diene rubbers such as natural rubber (examples) as well as other halogen free diene rubbers (col. 5, lines 22-30).

The fillers of the prior art of WOLFF utilized in the examples include silica, carbon black and clay. The specification further teaches calcium silicates having particle size of less than 0.4 microns or 400 nm (col. 5, line 66 to col. 6, line 21). Mixtures of the above fillers are both contemplated in the specification and utilized in the examples. Since silicates of the prior art of Scholl are also required by the claims of the present invention, their Mohs hardness will therefore be an intrinsic property.

The prior art of WOLFF as shown in the examples also discloses use of tackifiers, which by virtue will soften the composition (see Table for example I).

Although the prior art of WOLFF does not disclose glass fibers utilized in the examples, its use would be obvious for the following two reasons: One mixtures using glass fibers are contemplated by the prior art of WOLFF and two, it is well settled that it is prima facie obvious to combine two ingredients, each of which is targeted by the prior art to be useful for the same purpose. *In re Linder* 457 F,2d 506,509, 173 USPQ 356, 359 (CCPA 1972).

In the light of the above disclosure it would have been obvious to one having ordinary skill in the art at the time of the instant invention to utilize both glass fibers and silicate in the composition of WOLFF and thereby arrive at the present invention since it is prima facie obvious to combine two ingredients, each of which is targeted by the prior art to be useful for the same purpose.

Art Unit: 1714

4. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over SCHOLL (US 6,025,415).

The prior art of SCHOLL discloses rubber composition for use in tire treads (col. 7, lines 55-56), which composition comprises rubbers and fillers.

The rubbers of SCHOLL'415 include diene based rubber such as BR (Example 9), ABR, IR, SBR, IIR, NBR, HNBR and EPDM (col. 5, lines 40-51).

Fillers of SCHOLL'415 in addition to silica include clays, silicates such as calcium silicate having particle size of less than 0.4 microns or 400 nm, glass fibers and metal hydroxides (col. 5, lines 1-31). Although the prior art of SCHOLL did not specifically state that the mixtures of fillers are suitable for use, it does use mixtures in the examples. Therefore mixtures of fillers are definitely contemplated by the prior art of SCHOLL. Therefore, it is well settled that it is prima facie obvious to combine two ingredients, each of which is targeted by the prior art to be useful for the same purpose. *In re Linder* 457 F.2d 506,509, 173 USPQ 356, 359 (CCPA 1972).

The prior art of SCHOLL also contemplates use of tackifiers, which by virtue will soften the composition (col. 6, line 58).

In the light of the above disclosure it would have been obvious to one having ordinary skill in the art at the time of the instant invention to utilize both glass fibers and silicate in the composition of Scholl and thereby arrive at the present invention since it is prima facie obvious to combine two ingredients, each of which is targeted by the prior art to be useful for the same purpose.

Art Unit: 1714

In the amendment mailed on 12/18/2003 the applicants argued the following:

a) The prior art of KENT does not teach tire treads.

The prior art of KENT teaches orthopedic material, and it is no longer relied on as a prior art.

b) The prior art of SCHOLL does not teach that mixtures of fillers can be utilized, therefore it does not establish *prima facie* obviousness against present claims.

In addition to the examples of SCHOLL the applicants are requested to review col. 5, lines 7-8 again.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

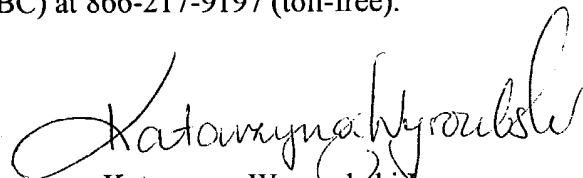
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 1714

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna Wyrozebski Lee whose telephone number is (571) 272-1127. The examiner can normally be reached on Mon-Thurs 6:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Katarzyna Wyrozebski Lee
Primary Examiner
Art Unit 1714

kiwl
March 4, 2004